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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,903	02/01/2005	Stephanie Frahn	264742US0X PCT	7011
22850	7590	03/12/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
NERANGIS, VICKIE MARIE				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
03/12/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

### Office Action Summary

**Application No.**

10/522,903

**Applicant(s)**

FRAHN ET AL.

**Examiner**

Vickey Nerangis

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 6-13 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/2/2009 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

***Claim Rejections - 35 USC § 102***

3. Claim 2-13 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,020,419 (hereinafter, "Bock").

Bock discloses a coating composition comprising 0.5-25 wt % based on solids of hydrophobic, pyrogenic silica, a binder such as one of polyurethane, polyisocyanate, polyester, and polyacrylate (col. 4, lines 13-26 and col. 5, lines 1-29), and pyrogenic silica and solvent (col. 6, lines 17-30). The pyrogenic silica is treated with octyltrimethoxysilane or dimethyldimethoxysilane, which provides for octylsilyl and dimethylsilyl groups on the surface of the pyrogenic silica and hexamethyl-disilazane which provides for hexadecylsilyl and alkyl silyl groups (col. 3, lines 60-67). Additives are also used (col. 6, line 60 to col. 7, line 13). See examples.

In light of the above, it is clear that Bock anticipates the presently cited claims.

***Response to Arguments***

4. Applicant's arguments filed 2/26/2009 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that "structurally modified" is a term well known in the art; (B) that Bock does not disclose "structurally modified" pyrogenic silica; and (C) that the instant invention provides for unexpectedly improved scratch resistance

With respect to argument (A), applicant cites Meyer '531, Meyer '642, Nargiello, and Hartmann as evidence, however, these are not convincing given that Meyer '531, Meyer '642, Nargiello, and Hartmann are all owned by the present assignee and therefore cannot serve to establish the ordinary and customary term of the art. There is no indication on the record that establishes that any person of ordinary skill outside of the Degussa family refers to "structurally modified" as silica that is subject to ball milling. Evidence to support the examiner's position is found in Mort et al (US 4,613,556) which teaches that silicon oxide can be structurally modified by exposure to energetic radiation (col. 12, lines 10-12) or in Sands et al (US 5,001,183) which teaches structuring silica by acidifying silica (col. 4, lines 8-16). Furthermore, the specification does not elaborate on what type of structural modification is being performed, i.e., is it chemical or physical?

With respect to argument (B), while the instant claims recite "structurally modified" silica, it is not made clear how "structurally modified" silica is different from the silica taught by Bock or why the pyrogenic silica of Bock is not structurally modified. Bock teaches that the silica is prepared by jet dispersion, and it is the examiner's position that this process causes the silica to be "structurally modified" due to the deagglomeration of silica agglomerates. Furthermore, the specification does not elaborate on how the instant silica is "structurally

modified.” Applicant has requested that the examiner set “forth specific factual findings predicated on explicit and sound technical and scientific reasoning to support the conclusion that the conventional pyrogenic silica of the coating composition of Bock is ‘structurally modified’ in accordance with the pyrogenic silica of the claimed lacquer composition” (page 12 of response filed on 2/26/2009), however, the examiner has already done so by show that structural modification can mean various things in the art as evidenced by Mort et al and Sands et al. Given that applicant does not have support for a specific type of surface modification that requires ball milling, the examiner can only rely on what is known in the art and which encompasses surface modification by jet dispersion like taught by Bock.

With respect to argument (C), the data in the specification cannot establish unexpected results for several reasons. First, it has not been established how “structurally modified” silica differentiates itself from the silica of Bock. See discussion above.

Second, evidence of secondary considerations is irrelevant to 35 USC 102 rejections and thus cannot overcome a rejection so based. *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

Third, the data is not reasonably commensurate in scope with the scope of the claims. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Specifically, the type of polymer composition in the lacquer (i.e., acrylic copolymer) is not commensurate in scope with the scope of the claims. Case law holds that evidence of superior properties in one species insufficient to establish the nonobviousness of a subgenus containing hundreds of compounds. *In re Greenfield*, 571 F.2d 1185, 1189, 197 USPQ 227, 230

(CCPA 1978). Furthermore, the relative amounts binder and silica are not reasonably commensurate in scope. Case law holds that whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the “objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support.” In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range (i.e., scope). *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980), MPEP 716.02(d).

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Vickey Nerangis/  
Examiner, Art Unit 1796